# NOMENCLATURAL NOTES ON NEARCTIC PTEROSTICHINI (COLEOPTERA: CARABIDAE)

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## ABSTRACT

The author points out that the generic name Evarthrus LeConte 1852 must be replaced by Cyclotrachelus Chaudoir 1838. The following new synonyms (with the senior synonym in parenthesis) are proposed: Evarthrus perseverus Motschulsky (=Feronia moesta Say), Evarthrus basilaris Motschulsky (=Evarthrus convivus LeConte), Evarthrus licinoides Motschulsky (=Feronia sodalis LeConte), Evarthrus nimius Motschulsky (=Feronia sigillata Say), Eumolops decepta Casey and Pterostichus texicola Csiki (=Evarthrus texanus Motschulsky = Cyclotrachelus torvus texanus Motschulsky). Four type-species are designated: Feronia imitatrix Tschitschérine (=Feronia haematopus Dejean) for Boreobia Tschitschérine (=Stereocerus Kirby), Feronia castanea Dejean for Hypherpes Chaudoir, Pterostichus tarsalis LeConte for Pheryphes Casey and Feronia nivalis F. Sahlberg for Pseudocryobius Motschulsky (=Cryobius Chaudoir).

# RÉSUMÉ

L'auteur fait remarquer que le nom générique Evarthrus LeConte 1852 doit ètre remplacé par Cyclotrachelus Chaudoir 1838. Les synonymes suivants (avec le synonyme ancien entre parenthèses) sont proposés pour la première fois: Evarthrus perseverus Motschulsky (= Feronia moesta Say), Evarthrus basilaris Motschulsky (= Evarthrus convivus LeConte), Evarthrus licinoides Motschulsky (= Feronia sodalis LeConte), Evarthrus nimius Motschulsky (= Feronia sigillata Say), Eumolops decepta Casey et Pterostichus texicola Csiki (= Evarthrus texanus Motschulsky = Cyclotrachelus torvus texanus Motschulsky). L'espèce-type est désignée pour quatre taxa: Feronia castanea Dejean pour Hypherpes Chaudoir, Pterostichus tarsalis LeConte pour Pheryphes Casey et Feronia nivalis F. Sahlberg pour Pseudocryobius Motschulsky (= Cryobius Chaudoir).

This paper provides some nomenclatural notes on Nearctic Pterostichini (*sensu stricto*). The proper use of the generic name *Evarthrus* LeConte is discussed, five species described by Motschulsky (1865) are examined and the type-species of four taxa are proposed.

## ON THE PROPER USE OF THE NAME EVARTHRUS LECONTE

#### In 1852, LeConte erected the genus *Evarthrus* and pointed out (p. 225):

"The second of these [Evarthrus Lec.] was already established by Chaudoir upon a single species under the name Cyclotrachelus, which is totally inapplicable to most of the species of the genus as here set forth: as, moreover, Baron Chaudoir would probably refuse to consider my group as constituting a single genus, corresponding with his Cyclotrachelus, I have felt myself compelled to adopt a new name, leaving to those who may wish still farther to divide the genus, the power to restoring Cyclotrachelus to the particular set of species for which it was intended."

For more than two decades, both *Evarthrus* LeConte and *Cyclotrachelus* Chaudoir were considered as valid subgenera of one genus, but all authors (e.g., Ball 1960, Freitag 1969, Erwin *et al.* 1977, Thompson 1979) have retained the name *Evarthrus* LeConte for the genus. Since Chaudoir's name is older than LeConte's name, *Cyclotrachelus* Chaudoir is the valid name for the genus (I.C.Z.N., Article 23 (e) (i)). The nomenclature of the genus is summarized as follows (subgeneric synonyms are not listed):

- Genus Cyclotrachelus Chaudoir 1838, type-species: Feronia tenebricosa Dejean (=Molops faber Germar) (by monotypy).<sup>1</sup>
- subg. Fortax Motschulsky 1865, type-species: Feronia morio Dejean (designated by Freitag 1969: 101).

subg. Cyclotrachelus s. str.

subg. *Evarthrus* LeConte 1852, type-species: *Feronia sigillata* Say (designated by Casey 1918: 322).

#### NEW SYNONYMIES

In 1865, Motschulsky described five new species of the genus *Evarthrus* LeConte (=*Cyclotrachelus* Chaudoir). These species were overlooked by Freitag (1969) in his taxonomic revision of the genus probably because Csiki (1930), without giving a reason, listed them under the subgenus *Cryobius* Chaudoir of *Pterostichus* Bonelli. Through the courtesy of Dr. N. Nikitsky of Moscow University, USSR, I have had the opportunity to study the type material of these species.

## Evarthrus perseverus

Motschulsky's collection contains a single female specimen under this name (Cf. Keleinikova 1976), with the following labels: "Type"/"Evarthrus perseverus Motch Am.bor."/red square label. The label "LECTOTYPE, Evarthrus perseverus Motsch., des. 1983, Y. Bousquet" has been attached to it. The specimen agrees with those of *Pterostichus moestus* (Say) and consequently *Evarthrus perseverus* Motschulsky (1865) is a junior synonym of *Feronia moesta* Say (1823) (*syn. nov.*). The lectotype is in poor condition with both antennae (except for the basal segment of the right antenna), palpi (except for the basal segment of the right labial palpus and the left maxillary palpus), both anterior legs (except for the coxa and trochanter), the left median leg (except for the coxa and trochanter), all tarsi of the posterior legs, part of the last abdominal segment and the genitalia missing.

### Evarthrus basilaris

A single male specimen is present under this name in Motschulsky's collection (Cf. Keleinikova 1976). It bears the following labels: small green disc/"Type"/"Evarthrus basilaris Motch. Am.b.Mobile"/red square label. The label "LECTOTYPE, Evarthrus basilaris Motsch., des. 1983, Y. Bousquet" has been attached to it. The specimen agrees with those of *Cyclotrachelus convivus* (LeConte) and consequently *Evarthrus basilaris* Motschulsky (1865)

<sup>&</sup>lt;sup>1</sup>The designation of *Molops faber* Germar by Freitag (1969: 109) and *Cyclotrachelus roticollis* Casey (=*Molops faber* Germar) by Casey (1918: 348) is invalid since these taxa were not originally included by Chaudoir.

is a junior synonym of *Evarthrus convivus* LeConte (1852) (*syn. nov.*). Both antennae (except for the first 2 segments of the right antenna), both maxillae, the last 2 segments of both labial palpi, all tarsal segments (except for the basal segment of the left leg) of both anterior legs, the last tarsal segment and part of the femur of the left median leg, the last 3 tarsal segments and part of the femur of the right median leg, all tarsal segments of the right posterior leg, the femur (except for the extreme basis), tibia and tarsal segments of the left posterior leg and the genitalia are missing in the lectotype.

### Evarthrus licinoides

Motschulsky's collection contains a single female specimen under this name (Cf. Keleinikova 1976), with the following labels: "N.O." (on a small green disc)/"Type"/"Evarthrus licinoides Motch. Am.bor."/red square label. The label "LECTOTYPE, Evarthrus licinoides Motsch., des. 1983, Y. Bousquet" has been added to it. The specimen agrees with those of Cyclotrachelus sodalis sodalis (LeConte) and consequently Evarthrus licinoides Motschulsky (1865) is a junior synonym of Feronia sodalis LeConte (1848) (syn. nov.). The specimen has both antennae (except for the basal segment of the left antenna and the first 3 segments of the right antenna) and maxillary palpi, the last 2 segments of both labial palpi, the last tarsal segment of the right anterior leg, the apical part of the femur, the tibia and the tarsal segments of the right median and posterior legs, all tarsal segments of the left posterior leg, a large section of the abdomen (including the last 3 segments) and the genitalia missing.

#### Evarthrus nimius

Motschulsky's collection probably contains only one specimen under this name<sup>2</sup>. The female specimen I have seen bears the following labels: "S.E. Pa se-VIII" / "Pter. sigillata" / "Type" / "Evarthrus nimius Motch. Am.bor."<sup>3</sup>. The label "LECTOTYPE, Evarthrus nimius Motsch., des. 1983, Y. Bousquet" has been attached to it. The specimen agrees with those of *Cyclotrachelus sigillatus* (Say) and consequently *Evarthrus nimius* Motschulsky (1865) is a junior synonym of *Feronia sigillata* Say (1823) (*syn. nov.*). The specimen has the last 9 segments of both antennae, the last segment of each labial palpus, the right maxillary palpus, the last 2 segments of the left maxillary palpus and the genitalia missing.

#### Evarthrus texanus

One female specimen is included under this name in Motschulsky's collection (Cf. Keleinikova 1976). It bears the following labels: "Type"/"Evarthrus texanus Motch. Am.bor."/red square label. The label "LECTOTYPE, Evarthrus texanus Motsch., des. 1983, Y. Bousquet" has been attached to it. The specimen agrees with those of *Cyclotrachelus torvus deceptus* (Casey 1918). As Motschulsky's name is older than Casey's name, the valid name of the taxon is *C. torvus texanus* (Motschulsky 1865) and consequently *Eumolops decepta* Casey (*syn. nov.*), along with *Eumolops impolita* Casey and *Evarthrinus minax* Casey listed by Freitag (1969: 162) as synonyms of *C. torvus deceptus*, are junior synonyms of *Evarthrus texanus* Motschulsky. Furthermore, because *E. texanus* became a junior secondary homonym

<sup>&</sup>lt;sup>2</sup>The species is not listed by Keleinikova (1976).

<sup>&</sup>lt;sup>3</sup>According to Motschulsky (1865: 260), the specimen is from Ohio.

of *Pterostichus (Poecilus) texanus* LeConte (1863) when *Evarthrus* (=*Cyclotrachelus*) and *Poecilus* were regarded as subgenera of *Pterostichus*, Csiki (1930: 659) changed Motschulsky's name to *Pterostichus texicola*. However, *Evarthrus* is actually considered as a distinct genus from *Pterostichus*, as *Poecilus* should be (Bousquet, unpublished data), and consequently *Pterostichus texicola* Csiki is here listed as a junior objective synonym of *Evarthrus texanus* Motschulsky (*syn. nov.*). Both antennae (except for the first 3 segments), the last segment of the left maxillary palpus, the last tarsal segment of both anterior legs, both median and the left posterior leg (except for the coxa and trochanter) and the right posterior leg are missing in the lectotype.

## **TYPE-SPECIES DESIGNATIONS**

Four supraspecific taxa of Pterostichini listed (under *Pterostichus* Bonelli) by Erwin *et al.* (1977) are left without valid type-species designations. For each of these taxa, I designate here a type-species from the species originally included.

Boreobia Tschitschérine 1896, type-species: Feronia imitatrix Tschitschérine (=Feronia haematopus Dejean) (present designation). Boreobia is a junior subjective synonym of Stereocerus Kirby (1837).

Hypherpes Chaudoir 1838, type-species: Feronia castanea Dejean (present designation). Originally, Chaudoir (1838:8) designated as the type-species Platysma amethystinum but the name remained a manuscript name until 1843 (Mannerheim 1843: 201) and was therefore not available. The designation of Feronia valida Dejean (=Pterostichus algidus LeConte) as the type-species of Hypherpes by Casey (1918: 321) is invalid since the species was not originally included by Chaudoir in the taxon.

*Pheryphes* Casey 1920, type-species: *Pterostichus tarsalis* LeConte (present designation; first species name recorded [1. c., p. 186]).

*Pseudocryobius* Motschulsky 1850, type-species: *Feronia nivalis* F. Sahlberg (present designation; first name recorded in list of included species [1. c., p. 54]). *Pseudocryobius* is a junior subjective synonym of *Cryobius* Chaudoir (1838).

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